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Title of the invention

A DECANter CENTRIFUGE WITH A SCREW CONVEYOR HAVING A  
VARYING PITCH

5 Field of the invention

The present invention relates to a decanter centrifuge for separation of a supplied material in a light phase and a heavy phase, comprising an elongate bowl arranged for rotation about its longitudinal  
10 axis, said bowl having a separation chamber, a screw conveyor being provided in the separation chamber and being coaxial with the bowl, said screw conveyor comprising a body, which carries a screw comprising one or more flights and having a nominal transport speed  
15 varying along the longitudinal axis, an inlet with at least one inlet opening in the screw conveyor for supply of the material to the separated, and at least one discharge opening for the heavy phase in the bowl at one end of the screw conveyor, in which the screw  
20 conveyor is made to rotate relative to the bowl in view of conveying the heavy phase towards the discharge openings for the heavy phase, and in which the screw conveyor is provided with a baffle positioned between the inlet openings and the discharge open-  
25 ings, said baffle dividing the separation chamber in a substantially cylindrical separation part and an at least partially conical discharge part, the discharge openings for the heavy phase being positioned in the discharge part, the inlet openings being positioned  
30 at the opposite side of the baffle relative to said discharge openings.